

**CLAIMS**

1           1.       A method for marking petroleum products, the method comprising the steps of:  
2                   adding a marker which has a high molar absorptivity in the wavelength range of  
3   600 - 1000 nm to a petroleum product;  
4                   mixing the marker in the petroleum product; and  
5                   detecting the marker in the petroleum product.

1           2.       The method of claim 1 wherein the marker contains a compound selected from  
2   the group consisting of metal containing and metal free phthalocyanine dyes, metal containing  
3   and metal free naphthalocyanine dyes, squarilium dyes, croconic acid dyes, indole and  
4   substituted indole cyanine and carbocyanine dyes, thiazole type cyanine and carbocyanine dyes,  
5   oxazole type cyanine and carbocyanine dyes, metal dithiolene complexes, and indoaniline metal  
6   complexes.

1           3.       The method of claim 2 wherein the marker is detected using an IR spectrometer.

1           4.       The method of claim 2 wherein the marker is used to determine if the petroleum  
2   product has been adulterated.

1           5.       The method of claim 2 wherein the petroleum product is in diesel fuel.